Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendments, Commissioner for Patents, P.O.. Box 1450, Alexandria, VA 22313-1450.

Date: April 7, 2005

PATENT 50626.55

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

application of:

Chun Ho FAN et al.

Serial No.: 10/660,611

Filing Date: September 12, 2003

For: IMPROVED BALL GRID ARRAY PACKAGE AND

PROCESS FOR MANUFACTURING SAME

Art Unit: 2877

Examiner: Unknown

COMMENTARY RE INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 **Alexandria, VA 22313-1450**

Dear Sir:

In accordance with 37 CFR §1.56, and in recognition of their duty to disclose to the United States Patent and Trademark Office relevant information known to be material to patentability, Applicants herewith submit a copy of the prior art listed on the attached Form PTO-1449. Applicants are not submitting herewith a copy of the U.S. references as this is no longer a USPTO requirement.

The statement is not a representation that all of the information cited is necessarily effective as prior art against the application.

U.S. Application No. 10/660,611 April 7, 2005 Page 2 of 2

Applicants respectfully request that the disclosed reference be made of record in the subject application.

Respectfully submitted,

Date: April 7, 2005

Attorneys for Applicant(s)

Joseph R. Keating Registration No. 37,368

Christopher A. Bennett Registration No. 46,710

KEATING & BENNETT, LLP

10400 Eaton Place, Suite 312 Fairfax, Virginia 22030

Telephone: (703) 385-5200 Facsimile: (703) 385-5080

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE stion Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Paperwork Refuction

IRAD

Substitute for form 1449/PTO

Sheet 1

APR 0 8 2005

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known			
Application Number	10/660,611		
Filing Date	September 12, 2003		
First Named Inventor	Chun Ho FAN et al.		
Art Unit	2812		
Examiner Name	unknown		
Attorney Docket Number	50626.55		

			U.S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	US- 4,698,662 A	10/1987	Young et al.	
-	2	US- _{5,172,213} A	12/1992	Zimmerman	
	3	US- 5,311,060 A	05/1994	Rostoker et al.	
	4	US- _{5,329,423} A	07/1994	Scholz	
	5	US- 5,339,216 A	08/1994	Lin et al.	
	6	US- _{5,435,732} A	07/1995	Angulas et al.	
	7	US- _{5,444,025} A	08/1995	Sono et al.	
	8	US- _{5,493,153} A	02/1996	Arikawa et al.	
	9	US- _{5,609,889}	03/1997	Weber	
	10	US- 5,610,442 A	03/1997	Schneider et al.	
	11	US- _{5,639,694} A	06/1997	Diffenderfer et al.	
	12	US- _{5,650,663} A	07/1997	Parthasarathi	
	13	US- _{5,679,978 A}	10/1997	Kawahara et al.	
	14	US- _{5,705,851} A	01/1998	Mostafazadeh et al.	
•	15	US- _{5,736,785} A	04/1998	Chiang et al.	
	16	US- _{5,773,362} A	06/1998	Tonti et al.	
	17	US- _{5,877,552} A	03/1999	Chiang	
	18	US- _{5,898,219} A	04/1999	Ваггом	
	19	US- _{5,901,043}	05/1999	Lin et al.	

Examiner Initials*	Cite No.1			Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁵ (<i>if known</i>)	MM-DD-YYYY		Or Relevant Figures Appear	Τ,		
	1	DE 100 15 962 A1	10/2001			1		
	2	JP 2-278783	11/1990			4		
	3	JP 9-232690	09/1997			~		

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Complete if Known

Application Number 10/660,611

Filing Date September 12, 2003

First Named Inventor Chun Ho FAN et al.

Art Unit 2812

				T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevan Figures Appear
	20	US- 5,977,626 A	11/1999	Wang et al.	
	21	US- 5,985,695 A	11/1999	Freyman et al.	
	22	US- 5,986,885 A	11/1999	Wyland	
	23	US- 6,016,013 A	01/2000	Baba	
	24	US- 6,037,658 A	03/2000	Brodsky et al.	
	25	US- 6,075,712 A	06/2000	McMahon	
	26	US- 6,175,161 B1	01/2001	Goetz et al.	
	27	US- 6,181,569 B1	01/2001	Chakravorty	
	28	US- 6,236,568 B1	05/2001	Lai et al.	
	29	US- 6,251,706 B1	06/2001	Paniccia	
	30	US- _{6,323,066} B2	11/2001	Lai et al.	
	31	US- 6,388,335 B1	05/2002	Lam	
	32	US- 6,414,385 B1	07/2002	Huang et al.	
	33	US- 6,462,405 B1	10/2002	Lai et al.	
_	34	US- _{6.525.421 B1}	02/2003	Chia et al.	
	35	US- 6,631,078 B2	10/2003	Alcoe et al.	
	36	US- 6,656,770 B2	12/2003	Atwood et al.	
	37	US- 6,737,755 B1	05/2004	McLellan et al.	
	38	US- 6,800,948 B1	10/2004	Fan et al.	

		FORE	IGN PATENT DOCU	MENTS			
Examiner Initials*	Cite No.1		Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶	
						<u> </u>	
						-	
		, , , , , , , , , , , , , , , , , , ,					

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

Sheet 3

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	10/660,6``			
Filing Date	September 12, 2003			
First Named Inventor	Chun Ho FAN et al.			
Art Unit	2812			
Examiner Name	unknown			
Attorney Docket Number	50626.55			

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No.¹	Number-Kind Code ^{2 (d known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	39	US- 6,818,472 B1	11/2004	Fan et al.	
	40	US- 2001/0015492 A1	08/2001	Akram et al.	
	41	US- 2002/0005578 A1	01/2002	Kodama et al.	
	42	US- 2002/0006718 A1	01/2002	Distefano	
	43	US- 2002/0180035 A1	12/2002	Huang et al.	
	44	US- 2002/0185734 A1	12/002	Zhao et al.	
	45	US- 2003/0034569 A1	02/2003	Caletka et al.	
	46	US- _{2003/0075812}	04/2003	Cheng et al.	
	47	US- _{2003/0160309}	08/2003	Punzalan et al.	
		US-			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹			Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages		
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T ⁶			

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitu	Substitute for form 1449/PTO		Complete if Known		
0000				Application Number	10/660,611
INF	ORMATION	DIS	CLOSURE	Filing Date	September 12, 2003
STA	STATEMENT BY APPLICANT			First Named Inventor	Chun Ho FAN et al.
	(Use as many she	ate se r	nacassaru)	Art Unit	2812
	(Ose as many she			Examiner Name	unknown
Sheet	4	of	4	Attorney Docket Number	50626,55

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
	1	U.S. patent application Ser. No. 10/323,657, Chun Ho Fan et al., "Process for Manufacturing Ball Grid Array Package", filing date: Dec. 20, 2002.	
	2	U.S. patent application Ser. No. 10/643,961, Chun Ho Fan et al., "Improved Ball Grid Array Package and Process for Manufacturing Same", filing date: Aug. 20, 2003.	
	3	U.S. patent application Ser. No. 10/647,696, Mohan Kirloskar et al., "Improved Ball Grid Array Package and Process for Manufacturing Same", filing date: Aug. 25, 2003.	

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.